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Winter et al.

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(54) **NEUROCOGNITIVE ASSESSMENT
APPARATUS AND METHOD**

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128/920; 434/118**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

6,066,092 A * 5/2000 Cady et al. 600/300
6,280,198 B1 * 8/2001 Calhoun et al. 434/236

* cited by examiner

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(57) **ABSTRACT**

A neurocognitive assessment device is provided including a library of computer implemented neurocognitive tests. Each neurocognitive test is provided with a performance module, an instruction module and a correction module. The performance module generates a plurality of stimuli on a computer screen to which a test subject is prompted to respond. If the test subject produces N consecutive incorrect responses, the correction module automatically interrupts the test operation and displays test instructions on screen.

1 Claim, 13 Drawing Sheets

